**Supplementary Table S1.** Species assemblage used for approaches comparison. The data was collected between June and October of 2020 in Uruapan municipality of Michoacán state, Mexico. We used the stomach flushing method to obtain the stomach contents. The contents were stored in 3 mm3 eppendorf vials with ethanol (70 %). Each frog was marked using visual implant elastomers (VIE) to avoid obtaining measurement and stomach contents twice from the same specimen (pseudoreplication). Vials with stomach contents were transferred to the ecology laboratory of the Instituto de Ecología, A. C., Bajío regional center. The prey items were identified to the lowest taxonomic level possible using specialized keys. Complete raw data matrix can be found in Herrera-Lopera et al., (in prep.) or contacting the authors.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Prey items** | ***Dryophytes arenicolor***  (n = 27) | ***Eleutherodactylus angustidigitorum***  (n = 8) | ***Eleutherodactylus nitidus***  (n = 10) | ***Lithobates forreri***  (n = 18) |
| Actaletidae | 9 | 0 | 0 | 0 |
| Aphididae | 1 | 1 | 0 | 0 |
| Apidae | 0 | 0 | 0 | 1 |
| Armadillidae | 0 | 0 | 0 | 1 |
| Armadillidiidae | 0 | 0 | 0 | 8 |
| Asilidae | 2 | 0 | 0 | 0 |
| Carabidae | 3 | 0 | 0 | 15 |
| Cerambycidae | 0 | 0 | 0 | 1 |
| Ceratopogonidae | 0 | 0 | 0 | 1 |
| Cerylonidae | 4 | 0 | 0 | 0 |
| Chernetidae | 0 | 0 | 0 | 1 |
| Chrysomelidae | 7 | 0 | 0 | 1 |
| Cicadellidae | 0 | 0 | 0 | 1 |
| Cimicidae | 2 | 0 | 0 | 0 |
| Culicidae | 1 | 0 | 0 | 0 |
| Cranaidae | 0 | 0 | 0 | 1 |
| Cryptodesmidae | 0 | 0 | 0 | 2 |
| Cydnidae | 0 | 0 | 0 | 1 |
| Dicyrtomidae | 0 | 32 | 0 | 0 |
| Dipluridae | 2 | 0 | 0 | 0 |
| Dipsocoridae | 1 | 0 | 0 | 0 |
| Drosophilidae | 3 | 0 | 1 | 0 |
| Elateridae | 5 | 0 | 3 | 2 |
| Encyrtidae | 0 | 1 | 0 | 0 |
| Entomobryidae | 10 | 0 | 5 | 0 |
| Erebidae | 1 | 1 | 0 | 2 |
| Euconulidae | 1 | 0 | 1 | 1 |
| Fannidae | 1 | 0 | 0 | 1 |
| Figitidae | 0 | 2 | 0 | 0 |
| Forficulidae | 3 | 0 | 0 | 7 |
| Formicidae | 12 | 1 | 1 | 7 |
| Geometridae | 1 | 0 | 0 | 3 |
| Glaresidae | 0 | 0 | 0 | 14 |
| Gryllacrididae | 0 | 0 | 0 | 1 |
| Gryllidae | 0 | 0 | 0 | 1 |
| Hemerobiidae | 3 | 0 | 0 | 0 |
| Henicopidae | 4 | 0 | 2 | 1 |
| Hybotidae | 1 | 0 | 0 | 0 |
| Ichneumonidae | 1 | 0 | 0 | 0 |
| Ixodidae | 0 | 2 | 0 | 1 |
| Lampyridae | 0 | 0 | 1 | 0 |
| Lasiocampidae | 2 | 0 | 0 | 0 |
| Leptonetidae | 0 | 0 | 0 | 1 |
| Linyphiidae | 2 | 0 | 0 | 0 |
| Lithobiidae | 1 | 0 | 0 | 2 |
| Lumbricidae | 0 | 0 | 0 | 3 |
| Mecistocephalidae | 0 | 0 | 0 | 1 |
| Megaspilidae | 1 | 0 | 0 | 0 |
| Miridae | 3 | 2 | 1 | 0 |
| Miturgidae | 4 | 0 | 0 | 0 |
| Mymaridae | 1 | 0 | 0 | 0 |
| Nabidae | 0 | 0 | 1 | 0 |
| Nitidulidae | 1 | 4 | 0 | 1 |
| Noctuidae | 7 | 0 | 1 | 5 |
| Oxyopidae | 2 | 7 | 3 | 2 |
| Papilionidae | 1 | 0 | 0 | 8 |
| Pholsidae | 1 | 0 | 0 | 0 |
| Phoridae | 3 | 1 | 0 | 0 |
| Pieridae | 5 | 0 | 0 | 3 |
| Pisauridae | 3 | 0 | 0 | 0 |
| Plutellidae | 0 | 0 | 0 | 1 |
| Pompilidae | 0 | 0 | 0 | 1 |
| Pyralidae | 0 | 1 | 0 | 0 |
| Reduviidae | 4 | 0 | 1 | 2 |
| Romaleidae | 0 | 0 | 0 | 1 |
| Salticidae | 0 | 0 | 0 | 2 |
| Sciaridae | 4 | 0 | 0 | 0 |
| Sclerogibbidae | 0 | 0 | 1 | 0 |
| Scutigeridae | 2 | 0 | 0 | 0 |
| Sesiidae | 1 | 0 | 0 | 2 |
| Silvanidae | 1 | 0 | 1 | 0 |
| Sminthuridae | 2 | 0 | 2 | 0 |
| Sphaeriodesmidae | 0 | 0 | 0 | 1 |
| Spirostreptidae | 0 | 0 | 0 | 1 |
| Staphylinidae | 0 | 1 | 0 | 2 |
| Stephanidae | 0 | 0 | 0 | 1 |
| Tetracampidae | 1 | 0 | 0 | 0 |
| Tipulidae | 0 | 0 | 0 | 1 |
| Trigonalidae | 0 | 0 | 0 | 1 |
| Veronicellidae | 0 | 0 | 0 | 4 |
| Vespidae | 0 | 0 | 0 | 2 |
| Thomisidae | 1 | 0 | 0 | 0 |
| UI Collembola | 8 | 26 | 10 | 0 |
| UI Heteroptera | 0 | 1 | 0 | 0 |
| UI Lepidoptera | 2 | 0 | 0 | 0 |
| UI Polydesmida | 1 | 0 | 0 | 0 |
| Veronicellidae | 1 | 0 | 0 | 0 |
| Zodariidae | 3 | 3 | 0 | 1 |
| **Total** | 146 | 86 | 35 | 124 |